

SECTION 10210 — METAL WALL LOUVERS

PART 1 GENERAL

1.01 SECTION INCLUDES

- A. Louvers and frames
- B. Bird screening
- C. Blank out sheeting

1.02 RELATED SECTIONS

- A. Section 07421 “Composite Metal Building Panels
- B. Section 07900 “Joint Sealers” for sealant at louver perimeter

1.03 REFERENCES

- A. The following documents form a part of these specifications to the extent stated herein.
- B. Air Movement Council Association (AMCA)
AMCA 500 Test Method for Louvers, Dampers, and Shutters
- C. ASTM International (ASTM)
ASTM A 653 Steel Sheet, Zinc-Coated (Galvanized) or Zinc-Iron Alloy-Coated (Galvannealed) by the Hot-Dip Process

1.04 PERFORMANCE REQUIREMENTS

- A. Installed louver shall permit passage of air velocity of 350 ft/min without blade vibration or noise, with maximum static pressure loss of 0.1 inches measured at 300 ft/min.
- B. Louvers shall contain 50% free area.

1.05 SUBMITTALS

- A. Submit shop drawings, product data, operation and maintenance data, and samples under provisions of section 01300 Submittals.”

- B. Shop Drawings: Indicate layout, elevations, dimensions, and tolerances; head, jamb, and sill details; blade configuration; screening; and frames.
- C. Product Data: Describe design characteristics, maximum recommended air velocity, free area, materials, finishes, and manufacturer's installation instructions.
- D. Operation and Maintenance Data: Include lubrication schedules, and adjustment requirements.
- E. Samples: Two samples 12 x 12 inch in size illustrating finish and color of exterior and interior prefinish.

1.06 QUALITY ASSURANCE

Manufacturer: Assure company specializes in manufacture of AMCA-certified (AMCA 500) louvers with three years relevant experience.

PART 2 PRODUCTS

2.01 ACCEPTABLE MANUFACTURERS

- A. Air Louvers, Inc., Wonder Metals Corporation, or equal.
- B. Substitutions: Under provisions of section 01300 "Submittals."

2.02 MATERIALS

- A. Steel Sheet: ASTM A 653, galvanized to G90 zinc coating, prefinished with mill-applied paint finish.
- B. Fasteners and Anchors: Galvanized steel type.

2.03 ACCESSORIES

- A. Bird Screen: Interwoven wire mesh of steel; 0.063 inch diameter wire; 1/2 inch open weave; diagonal design.
- B. Flashings: Of same material as louver frame.
- C. Primer: Zinc chromate.

2.04 FABRICATION

- A. Louver Size: 6 inches deep, face measurements as indicated on the drawings.

- B. Louver Blade: Sloped at 45 degrees; minimum material thickness of 20 gauge with integral waterstops on blade.
- C. Louver Frame: Channel shape; mechanically fastened corner joints; material thickness of 18 gauge.
- D. Mullions: Exposed of steel; profile to suit louver frame.
- E. Blank Out Sheeting: Same material as louver and frame; minimum material thickness of 16 gauge; integral waterstops on blade.
- F. Head, Jamb, and Sill Flashings: Roll formed to required shape, one piece per location.
- G. Screens: Permanently install screen mesh in shaped frame with reinforced corner construction; screw to louver frame.

2.05 FINISHES

- A. Louver finish and color shall match those of building panels specified in section 07421.
- B. Exterior Steel Surfaces and Screens: Prepainted finish of color as selected by the University.
- C. Interior Steel Surfaces and Screens: Prepainted finish of color as selected by the University.

PART 3 EXECUTION

3.01 EXAMINATION

- A. Verify that prepared openings are ready to receive work and opening dimensions are as instructed by the manufacturer.
- B. By starting the work of this section, the Contractor warrants that it has examined and verified that the existing conditions comply with the provisions of preceding paragraphs of subpart 3.01.

3.02 INTERFACE WITH OTHER PRODUCTS

Coordinate work of this section with installation of metal siding.

3.03 INSTALLATION

- A. Install louver assembly in accordance with manufacturer's instructions.

- B. Install louvers level and plumb.
- C. Secure louvers in opening framing with concealed fasteners.
- D. Align louver assembly to ensure moisture shed from flashings and diversion of moisture to exterior.
- E. Install bird screening to exterior of louver.
- F. Install bird screens to intake louvers.
- G. Install perimeter sealant and backing rod in accordance with section 07900.

3.04 ADJUSTING AND CLEANING

Clean surfaces and components.

END OF SECTION